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Rosen et al.

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(54) **ENHANCED TORIC LENS THAT IMPROVES OVERALL VISION WHERE THERE IS A LOCAL LOSS OF RETINAL FUNCTION**

(58) **Field of Classification Search**
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(21) Appl. No.: **14/644,110**

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(57) **ABSTRACT**

Systems and methods are provided for improving overall vision in patients suffering from a loss of vision in a portion of the retina (e.g., loss of central vision) by providing an enhanced toric lens which redirects and/or focuses light incident on the eye at oblique angles onto a peripheral retinal location. The intraocular lens can include a redirection element (e.g., a prism, a diffractive element, or an optical component with a decentered GRIN profile) configured to direct incident light along a deflected optical axis and to focus an image at a location on the peripheral retina. Optical properties of the intraocular lens can be configured to improve or reduce peripheral errors at the location on the peripheral retina. One or more surfaces of the intraocular lens can be a toric surface, a higher order aspheric surface,

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